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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/679,119	10/04/2000	Roger P. Hoffman	P/2-75 CIP	7289

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EXAMINER

COSIMANO, EDWARD R

ART UNIT	PAPER NUMBER
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3629

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/679,119

Applicant(s)

HOFFMAN, ROGER P.

Examiner

Edward R. Cosimano

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14, 16-46, 48-71 and 79 is/are pending in the application.
- 4a) Of the above claim(s) none is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14, 16-46, 48-71 and 79 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/4/00 & 1/9/04 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Applicant should note the changes to patent practice and procedure:
 - A) effective December 01, 1997 as published in the Federal Register, Vol 62, No. 197, Friday October 10, 1997;
 - B) effective November 07, 2000 as published in the Federal Register, Vol 65, No. 54603, September 08, 2000; and
 - C) Amendment in revised format, Vol. 1267 of the Official Gazette published February 25, 2003.
2. The drawings are objected to because
 - A) the following errors have been noted in the drawings:
 - (1) The drawings are objected to as failing to comply with 37 CFR § 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description, note reference numbers:
 - (1) 201, 223 & 235 of fig. 2 as amended on January 09, 2004 as this figure is described in the paragraphs:
 - (a) between page 15, line 1, and page 22, line 8, "Figure 2 represents the sub-activity ... from 3,100 feet per minute to 3,000 feet per minute."; and
 - (b) between page 23, line 23, and page 24, line 3, "It is anticipated that the ... from remote locations, such as customer locations."
- 2.1 A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
- 2.2 Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.
3. The disclosure is objected to because of the following informalities:

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A) as required by 37 CFR § 1.84(p(5)) and 37 CFR § 1.121(e) the specification lacks an explicit reference to the nature of:

(1) reference legend(s):

(a) 201, 223 & 235 of fig. 2 as amended on January 09, 2004 as this figure is described in the paragraphs:

(a)(1) between page 15, line 1, and page 22, line 8, "Figure 2 represents the sub-activity ... from 3,100 feet per minute to 3,000 feet per minute."; and

(1)(2) between page 23, line 23, and page 24, line 3, "It is anticipated that the ... from remote locations, such as customer locations."

In this regard, it is noted that merely mentioning either a feature or a number with out mentioning the device or operation or number or feature relies on the drawing to provide support for the disclosure and not to aid in the understanding of the invention, as is the purpose of the drawings (37 CFR § 1.81(a,b)).

B) the subject matter of :

(1) claim 79 in regard to operation the using an operating speed/rate that results in a positive contribution to a marginal unit;

lacks antecedent basis within the specification as required by 37 CFR § 1.75(d1).

Appropriate correction is required.

4. The specification and drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification or drawings. Applicant should note the requirements of 37 CFR § 1.74, § 1.75, § 1.84(o,p(5)), § 1.121(a)-1.121(f) & § 1.121(h)-1.121(i).

5. Claim 79 is rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5.1 The subject matter of :

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A) claim 79 in regard to operation the using an operating speed/rate that results in a positive contribution to a marginal unit;

lacks antecedent basis within the specification as required by 37 CFR § 1.75(d1).

5.2 For the above reason(s), applicant has failed to particularly point out what is regarded as the invention.

6. 35 U.S.C. § 101 reads as follows:

"Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title".

6.1 Claims 33-46, 48-51, 56 & 57 are rejected under 35 U.S.C. § 101 because the invention as claimed is directed to non-statutory subject matter.

6.1.1 The instant claims recite a system/device, (claims 33-46, 48-51, 56 & 57), which has a practical application in the technological arts, and which does not merely define either a computer program, a data structure, non-functional descriptive material, (i.e. mere data) or a natural phenomenon. Hence, the instant claims merely define device that contains a series of steps that could be but are not necessarily to be performed on a computer.

6.1.2 It is further noted that applicant has not recited a specific machine since the operations recited in the claim are merely to illustrate the operations of the instant invention since these operations are not in fact implemented by a processor/computer. Hence, applicant envisions the invention as recited in claims 33-46, 48-51, 56 & 57 as a disembodied storage device, i.e. memory, that stores a computer program as a non-functional data structure. Such a disembodied storage device is not a specific machine because:

A) it is not associated with a computer in such a way as to cause the computer to operate in a specific manner, (note In re Beauregard 35 USPQ2d 1383 (CAFC 1995) and the associated claims of U.S. Patent 5,710,578); and

B) a memory alone can not perform the functions recited within the claims.

Therefore, the recited disembodied storage device, which itself can not perform the functions recited within the claims as the invention, is inoperative and lacks utility for the purpose of the invention.

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6.1.3 In view of the above, the invention recited in claims 33-46, 48-51, 56 & 57, merely describes an abstract idea of a disembodied storage device, i.e. memory, that stores a computer program as a non-functional data structure, since a disembodied storage device by itself can not produce a concrete and tangible result by performing the functions recited within the claims as the invention (State Street Bank & Trust Co. v. Signature Financial Group Inc. 47 USPQ2d 1596 (CAFC 1998)). Hence, claims 33-46, 48-51, 56 & 57 do not have a claimed practical application, since the disembodied storage device is inoperative and therefore lacks utility for the purpose of the invention.

6.1.4 Nonfunctional descriptive material cannot render nonobvious an invention that would have otherwise been obvious. Cf. *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983) (when descriptive material is not functionally related to the substrate, the descriptive material will not distinguish the invention from the prior art in terms of patentability). Common situations involving nonfunctional descriptive material are:

- a computer that differs from the prior art solely with respect to nonfunctional descriptive material that cannot alter how the machine functions (i.e., the descriptive material does not reconfigure the computer), or

- a process that differs from the prior art only with respect to nonfunctional descriptive material that cannot alter how the process steps are to be performed to achieve the utility of the invention.

6.1.5 Hence, claims 33-46, 48-51, 56 & 57 are directed to non-statutory subject matter.

7. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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(c) Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

7.1 Claims 1-14, 16-46, 48-71 & 79 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Hart et al (3,490,689) in view of obvious business considerations as evidence by Meng (4,442,710) and Key et al (Reference U on PTO-892).

7.1.1 In regard to claims 1-14, 16-46, 48-71 & 79, Hart et al ('689) discloses a paper making process which is controlled to maximize to profit, i.e. profit margin, for the paper making process. To determine the profit margin for the paper making process, Hart et al ('689) considers economic factors:

- A) the amount and cost of raw materials, (manufacturing inflows);
- B) the amount and price of the finished product (manufacturing outflows);
- C) the overhead and/or equipment and/or labor cost for the paper making process; and
- D) the quality of the finished product.

Based on this information the operator determined the desired operating conditions of the paper making process of Hart et al ('689). The control system of Hart et al ('689) then:

- A) determines the actual operating conditions of the paper making process;
- B) compares this actual and desired operating conditions; and
- C) controls the paper making process based on this comparison.

Further, Hart et al ('689) considers the efficiency of the paper making process, in that the process conditions are varied to determine the best operating conditions for the paper making process.

7.1.2 Hart et al ('689) does not explicitly disclose that the speed of the process is based on economic variables, however, at column 3, Hart et al ('689) discloses that the profit margin is based on economic factors:

- A) the amount and cost of raw materials, (manufacturing inflows);

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- B) the amount and price of the finished product (manufacturing outflows);
- C) the overhead and/or equipment and/or labor cost for the paper making process; and
- D) the quality of the finished product.

Since one of ordinary skill in operating a business would recognize that:

- (1) any manufacturing process which does not have enough raw materials can not produce a finished product; and
- (2) any manufacturing process which does not produce either:
 - (a) a sellable finished product, or
 - (b) a sufficient quantity of the finished product,

because at some the operating conditions of the process, i.e. the speed of the process, would not be profitable to the operator, it would have been obvious to one of ordinary skill at the time the invention was made that the speed of the Hart et al ('689)'s paper making process is controlled based on economic variables. Note: either Meng ('710) or Keys et al (U) which controls the speed of a process based on cost-effective business strategy that considers economic factors.

7.1.3 In regard to the claimed program product, although Hart et al ('689) discloses an analog/computer system to perform the disclosed control functions, it would have been obvious to one of ordinary skill at the time the invention was made that control system of Hart et al ('689) could be upgrades to a computerized controller with a control program since the prior art is replete with digital computers performing the same functions as the control system of Hart et al ('689). Note Meng ('710) which uses a computerized controller to control the speed of a process based on cost-effective business strategy.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR § 1.136(a).

8.1 A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory

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period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR § 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Response to applicant's arguments.

9.1 All rejections and objections of the previous Office action not repeated or modified and repeated here in have been over come by applicant's last response.

9.2 As per the objection to the disclosure and the rejection regarding claim 79, since:

A) claim 79 is among the claims presented for examination in the amendment filed January 09, 2004, note also the remarks at pages 17, 18; and

B) applicant has failed to cancel claim 79 as implied at page 15 of the amendment filed January 09, 2004; and

C) applicant has failed to point out where in the original specification there is support for the subject matter of claim 79.

The objection and rejection involving claim 79 is maintained, and applicant's arguments are non persuasive.

9.3 As per the 35 U.S.C. § 101 rejection, since:

A) one of ordinary skill a the time the invention was made would have readily recognized that:

(1) a storage device alone can not perform the recited function of inputting "into a manufacturing facility in conjunction with a computer system", with out controlling a computer to perform this function; and

(2) a storage device alone as recited in the claims does not control any system/computer to perform the functions recited in the claims with out controlling a computer to perform these function;

the invention as recited in these claims is inoperative for the desired purpose and therefore is abstract.

Hence, applicant's arguments are non persuasive.

9.4 As per the 35 U.S.C. § 103 rejection, since:

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A) the instant claims fail to recite a specific speed that the applied prior art can physically not achieve; and

B) the teachings of the applied prior art would apply regardless of the operating speed;

applicant's arguments concerning the difference in operating speeds over the time period between the applied prior art and the time that the invention was made are deemed non persuasive.

10. The examiner has cited prior art of interest, for example:

A) either Smith (6,378,408 or 6,382,062 or 6,701,816) disclose that the speed of a manufacturing process may vary based on the requirements of the processes that occur during the manufacturing process in order to reduce waste and the cost of raw materials and labor.

B) Chen et al (6,640,152) discloses that the speed of a paper manufacturing process affects the drying time and moisture content of the paper controlling a manufacturing process at a targeted speed.


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edward Cosimano whose telephone number is (703) 305-9783. The examiner can normally be reached Monday through Thursday from 7:30am to 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss, can be reached on (703)-308-2702. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-1113.

11.1 The fax phone number for UNOFFICIAL/DRAFT FAXES is (703) 746-7240.

11.2 The fax phone number for OFFICIAL FAXES is (703) 872-9306.

11.3 The fax phone number for AFTER FINAL FAXES is (703) 872-9306.

03/16/04


Edward R. Cosimano
Primary Examiner A.U. 3629